### In the Claims:

Please amend the claims as indicated below:

- 1. (Currently amended) A system, comprising:
- a plurality of devices implementing a plurality of peer nodes coupled to a network, wherein each of the plurality of devices implements at least one peer node;
- at least one of the plurality of peer nodes, wherein each of the at least one of the plurality of peer nodes is configured as a publisher peer node for a plurality of contents cached on the respective peer node, wherein each publisher peer node is configured to publish one or more advertisements on the network, wherein each advertisement corresponds to a specific one of the plurality of contents cached on the peer node, and wherein each advertisement includes information for requesting the specific corresponding content;
- wherein to publish the one or more advertisements on the network the publisher peer node is configured to send the one or more advertisements to a rendezvous peer node, wherein the rendezvous peer node caches the one or more advertisements; and
- at least a subset of the plurality of peer nodes, wherein each peer node in the subset is configured to:
  - discover published advertisements on the network from the rendezvous peer node by accessing the rendezvous peer node, wherein the published advertisements include two or more advertisements published by two or more content publisher peer nodes to advertise

<u>a particular content cached on each of the two or more content</u> <u>publisher peer nodes; and</u>

determine one of the two or more content publisher peer nodes as logically nearest on the network, wherein a logically nearest peer node is a peer node to which communications over the network take the least time;

request one or more specific contents each corresponding to one of the discovered advertisements in accordance with the information included in the respective advertisements; and

request the particular content from the logically nearest content publisher

peer node in accordance with the advertisement corresponding to

the logically nearest content publisher peer node;

wherein a publisher peer node that caches a content corresponding to a discovered advertisement is configured to provide the content corresponding to the discovered advertisement to a requesting peer node in response to a request for the content from the requesting peer node; and

wherein the requesting peer node is configured to cache the content and become an additional content publisher peer node for the content corresponding to the discovered advertisement.

#### 2. (Canceled)

3. (Currently amended) The system as recited in claim [[2]] 1, wherein the at least a subset of the plurality of peer nodes are each further configured to cache the particular content obtained from one or more of the content publisher peer nodes and become an additional content publisher peer node for the particular cached content.

4. (Currently amended) The system as recited in claim 1, wherein the at least a subset of the plurality of peer nodes are each configured to:

send a request for a particular other content on the network;

in response to the request:

receive a portion of the particular other content from a first content publisher peer node that caches the particular other content; and

receive another portion of the particular other content from a second content publisher peer node that also caches the particular other content.

5. (Currently amended) The system as recited in claim 1, wherein the at least a subset of the plurality of peer nodes are each configured to:

broadcast a request for a particular other content on the network;

receive a response to the request from each of two or more content publisher peer nodes that cache the <u>particular other</u> content;

determine a logically nearest one of the two or more content publisher peer nodes

that cache the other content on the network, wherein a logically nearest

peer node is a peer node to which communications over the network take
the least time; and

get the <u>other</u> content from the logically nearest <u>one of the two or more</u> content publisher peer nodes that cache the other content.

- 6. (Previously presented) The system as recited in claim 1, wherein the at least a subset of the plurality of peer nodes are member peers in a peer group.
- 7. (Previously presented) The system as recited in claim 1, wherein the plurality of peer nodes is configured to participate in a peer-to-peer environment on the network in accordance with one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peers-to-peer environment.
  - 8.-11. (Canceled)
  - 12. (Currently amended) A system, comprising:
  - a primary content publisher peer node configured to cache user-requestable contents and publish the cached contents for access by other peer nodes on a network;

an edge content publisher peer node configured to:

receive a plurality of the user-requestable contents from the primary content publisher peer node;

cache the received plurality of contents; and

publish the received plurality of contents for access by one or more of the other peer nodes on the network for which the edge content publisher peer node is logically nearer to the one or more of the other peer nodes than the primary content publisher peer node such that communications over the network between the edge content publisher peer node and the other peer node take less time than communications over the network between the primary content

publisher peer node and the other peer node regardless of physical proximity;

# an edge peer node configured to:

send a request for particular content on the network in response to a user request for the particular content;

if the edge content publisher peer node is logically nearer to the edge peer node on the network than the primary content publisher peer node, receive the particular content from the edge content publisher peer node; and

if the primary content publisher peer node is logically nearer to the edge

peer node on the network than the edge content publisher peer

node, receive the particular content from the primary content

publisher peer node;

wherein a logically nearer peer node is the peer node to which communications over the network take the least time.

#### 13. (Canceled)

- 14. (Currently amended) The system as recited in claim [[13]] 12, wherein the edge peer node is further configured to become an additional content publisher peer node for the particular content, wherein to become an additional content publisher peer node for the particular content, the edge peer node is configured to cache the particular content and publish the particular content for access by the other peer nodes on the network.
- 15. (Currently amended) The system as recited in claim 12, further comprising an wherein the edge peer node is configured to:

send a request for particular other content on the network in response to a user request for the particular other content;

receive a portion of the particular other content from the primary content publisher peer node in response to the request for other content;

receive a redirection to the edge content publisher peer node from the primary content publisher peer node; and

receive another portion of the particular other content from the edge content publisher peer node in response to the redirection.

- 16. (Original) The system as recited in claim 12, wherein the peer nodes are member peers in a peer group.
- 17. (Previously presented) The system as recited in claim 12, wherein the peer nodes are configured to participate in a peer-to-peer environment on the network in accordance with one or more peer-to-peer platform protocols for enabling the peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.
  - 18. (Canceled)
  - 19. (Canceled)
  - 20. (Currently amended) A method, comprising:
  - a content publisher peer node caching a plurality of separately user-requestable contents and publishing the cached user-requestable contents for access by other peer nodes on a network;

one of the other peer nodes:

requesting a particular content on the network in response to a user request for the particular content;

receiving the particular content from the content publisher peer node;

caching the received particular content; and

publishing the received particular content for access by the other peer nodes on the network;

a different peer node requesting the particular content on the network in response to a user request for the particular content, wherein the different peer node is an edge peer node;

if the one of the other peer nodes is logically nearer to the different peer node on the network than the content publisher peer node, the different peer node receiving the particular content from the one of the other peer nodes; and

if the content publisher peer node is logically nearer to the different peer node on the network than the one of the other peer nodes, the different peer node receiving the particular content from the content publisher peer node;

wherein a logically nearer peer node is the peer node to which communications over the network take the least time.

### 21. (Canceled)

22. (Previously presented) The method as recited in claim 20, further comprising the different peer node caching the particular content and publishing the particular content for access by the other peer nodes on the network.

### 23. (Canceled)

24. (Previously presented) The method as recited in claim 20, further comprising:

the different peer node receiving a portion of the particular content from the content publisher peer node in response to the request;

the different peer node receiving a redirection to the one of the other peer nodes from the content publisher peer node; and

the different peer node receiving another portion of the particular content from the one of the other peer nodes in response to the redirection.

- 25. (Previously presented) The method as recited in claim 20, wherein the content publisher peer node is a primary publisher of the particular content, and wherein the one of the other peer nodes is an edge publisher of the particular content.
- 26. (Original) The method as recited in claim 20, wherein the peer nodes are member peers in a peer group.
- 27. (Original) The method as recited in claim 20, wherein the peer nodes are configured to participate in a peer-to-peer networking environment implemented in accordance with one or more peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.

- 28. (Currently amended) A computer-accessible storage medium, comprising program instructions, wherein the program instructions are computer-executable to implement:
  - a content publisher peer node caching a plurality of separately user-requestable contents and publishing the cached user-requestable contents for access by other peer nodes on a network;

one of the other peer nodes:

requesting a particular content on the network in response to a user request for the particular content;

receiving the particular content from the content publisher peer node;

caching the received particular content; and

publishing the received particular content for access by the other peer nodes on the network;

- a different peer node requesting the particular content on the network in response to a user request for the particular content, wherein the different peer node is an edge peer node;
- if the one of the other peer nodes is logically nearer to the different peer node on the network than the content publisher peer node, the different peer node receiving the particular content from the one of the other peer nodes; and
- if the content publisher peer node is logically nearer to the different peer node on the network than the one of the other peer nodes, the different peer node receiving the particular content from the content publisher peer node;

wherein a logically nearer peer node is the peer node to which communications over the network take the least time.

### 29. (Canceled)

30. (Previously presented) The computer-accessible storage medium as recited in claim 28, wherein the program instructions are further computer-executable to implement the different peer node caching the particular content and publishing the particular content for access by the other peer nodes on the network.

# 31. (Canceled)

32. (Previously presented) The computer-accessible storage medium as recited in claim 28, wherein the program instructions are further computer-executable to implement:

the different peer node receiving a portion of the particular content from the content publisher peer node in response to the request;

the different peer node receiving a redirection to the one of the other peer nodes from the content publisher peer node; and

the different peer node receiving another portion of the particular content from the one of the other peer nodes in response to the redirection.

33. (Previously presented) The computer-accessible storage medium as recited in claim 28, wherein the content publisher peer node is a primary publisher of the particular content, and wherein the one of the other peer nodes is an edge publisher of the particular content.

- 34. (Previously presented) The computer-accessible storage medium as recited in claim 28, wherein the peer nodes are member peers in a peer group.
- 35. (Previously presented) The computer-accessible storage medium as recited in claim 28, wherein the peer nodes are configured to participate in a peer-to-peer networking environment implemented in accordance with one or more peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.